



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/054,952 | 01/25/2002 | James W. McCaherty | 8350.0763-00 | 6974 |

58982 7590 09/02/2009
CATERPILLAR/FINNEGAN, HENDERSON, L.L.P.
901 New York Avenue, NW
WASHINGTON, DC 20001-4413

| |
|----------|
| EXAMINER |
|----------|

FISHER, MICHAEL J

| | |
|----------|--------------|
| ART UNIT | PAPER NUMBER |
|----------|--------------|

3689

| | |
|-----------|---------------|
| MAIL DATE | DELIVERY MODE |
|-----------|---------------|

09/02/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | | | |
|------------------------------|--------------------------------------|--|--|
| Office Action Summary | Application No. 10/054,952 | Applicant(s) MCCAHERTY, JAMES W. | |
| | Examiner MICHAEL J. FISHER | Art Unit 3689 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 April 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13, 15-29 and 31-41 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13, 15-29 and 31-41 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-13,15-29 and 31-41 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. There is no transformation in the claims as currently amended and further, any use of technology is insignificant (i.e. sending, receiving and storing data) and as such, is deemed non-statutory.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Art Unit: 3689

Claims 1-6,8-13,16-22,24-29 and 32-41 are rejected under 35 U.S.C. 103(a) as being unpatentable over US PAT 4,605,081 to Helmly.

As to claims 1,15,17,33, Helmly discloses a computerized (fig 1) method for analyzing compliance with payload standard comprising a module for determining a first target payload (160, as best seen in fig 5), obtaining weight data for equipment (158, as best seen in fig 5), a module for comparing the two and analyzing compliance (168, 166, as best seen in fig 5) and a module for outputting the results (fig 4). Helmly does not, however, teach calculating a modified target payload weight based on the analysis. It would have been obvious to use the data for analyzing and modifying the payload as Helmly teaches the system as being used to comply with government regulations (abstract, lines 4-8) and if a load is above legal limits the company would be in danger of legal action taken against it and if a payload is above the legal limit, it would need to be recalculated.

As to claim 40, it would be done periodically (whenever it needed to be done). The loading practice would be modified based on the target payload (the amount dispensed). Helmly in view of Schlessinger does not, however, teach computing weights greater or less than compliant weight. It would have been obvious to know which weights are greater or lesser than the target weight so the loads would be at the target weight.

As to claims 2,18, Helmly discloses analyzing compliance (168, 166, as best seen in fig 5), analyzing compliance with a second payload standard (length of truck, 164, as best seen in fig 5) not equal to the first (weight).

Art Unit: 3689

As to claims 3,19, the target payload is based on type of payload (abstract, lines 8-13), it is inherent that different payloads would have different legal limits.

As to claims 4,5,20,21, Helmly discloses obtaining the empty weight (col 2, lines 20-22), as Helmly discloses it as being used more than once, it would inherently be done for two or more pieces of equipment of the equipment type (tractor-trailer). Helmly does not, however, teach averaging the weights of multiple equipments (fleet or not). It would have been obvious to one of ordinary skill in the art to average the weights of multiple trucks for statistical purposes such as determining an average for all trucks of the same type.

As to claims 6,22 it would be inherent that a target payload is that which is added to the empty weight to achieve target payload, therefore, it would have been obvious to do this subtraction to determine the proper load.

As to claims 8,10,26, applicant has shown the percentage of acceptable overload to be old and well known in the art (paragraphs 2-6, starting on pg 1 of the specification of the instant application), as such, it would have been obvious to one of ordinary skill in the art to determine the percentages as the applicant has shown that this is well known. Compliance would have been checked using this standard.

As to claims 9,24, Helmly would have determined this if the payload weights were above the maximum threshold.

As to claims 11,27, Helmly discloses providing a compliance rating based on the comparison ("...within allowable weight", col 7, lines 43-51).

Art Unit: 3689

As to claims 12,28 Helmly determines the payload on a predetermined factor (maximum allowable weight).

As to claims 13,29 Helmly discloses graphically illustrating the results (fig 4).

As to claims 16,32, Helmly discloses determining equipment identification (col 5, lines 17-28).

As to claim 25, it would have been obvious to one of ordinary skill in the art to use the lesser of these values to ensure that the truck is compliant.

As to claims 34, 35, there is a network connection (fig 1).

As to claim 36, the output module is connected to a device to send data over a network (fig 1).

As to claim 37, there is shown to be a payload database (inherent in that the system is shown to have payload weight information, col 2, lines 4-10), a processor (fig 1), an equipment database (inherent in that there is shown to be information stored on the equipment) with payload standard information (what type of payload the vehicle can carry).

As to claim 38, it would have been obvious to one of ordinary skill in the art to obtain payload compliance data to check for compliance as overloading a vehicle could void the warranty.

As to claim 39, it would have been obvious to have a standard and to determine the numbers as this would quantify the results.

As to claim 41, it would have been obvious to one of ordinary skill in the art to look at a trucks performance to schedule maintenance as maintenance is also based on regulatory requirements that include miles and hours.

Claims 7,15,23 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Helmly as applied to claims above, and further in view of US PAT 7,136,787 to Schlessinger et al. (Schlessinger).

As to claims 7,15,23 and 31, Helmly teaches a method and system as discussed above. Helmly does not, however, teach using statistical analysis, such as standard deviation, to refine the data.

Schlessinger teaches using standard deviation for statistical analysis (col 17, lines 38-40, claim 36, claim 53), therefore, it would be obvious to use standard deviation and statistical methods as taught by Schlessinger to refine the data of Helmly to ensure accuracy of computations to ensure compliance with the law on all payloads, as Helmly does not teach using the system only once, it would be obvious to track overloads so as to ensure proper payloads in the future to reduce the risk of fines.

Response to Arguments

Applicant's arguments filed 4/22/09 have been fully considered but they are not persuasive. As applicant notes in the arguments, "...If yes, [the system indicated] an error message requiring the driver to dump his excess load...", that would be the "modified payload", thereby meeting the limitations as claimed. The examiner agrees

Art Unit: 3689

that Helmly does not specifically mention using a plurality of data points, however, it would be obvious to see if any trends are occurring (for instance, if one depot habitually overloads or underloads their trucks, either of which would result in reduced profits as trucks go out underloaded they will need more trucks to ship the same amount of goods, or if trucks are overloaded, they could fined). Schlessinger is merely used to show that statistical analysis of numbers is old and well known in the art and would not render the instant invention patentably distinct.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MICHAEL J. FISHER whose telephone number is (571)272-6804. The examiner can normally be reached on Mon.-Fri. 7:30am-5:00pm alt Fri. off.

The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3689

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Michael J Fisher/
Examiner, Art Unit 3689
MF

8/14/09